



0000102387

## BEFORE THE ARIZONA CORPORATION

**COMMISSIONERS**

Kristin K. Mayes, Chairman  
Gary Pierce  
Sandra D. Kennedy  
Paul Newman  
Bob Stump

IN THE MATTER OF THE APPLICATION OF  
UNS ELECTRIC, INC., IN CONFORMANCE  
WITH THE REQUIREMENTS OF ARIZONA  
REVISED STATUTES §§ 40-360, *et seq.*, FOR  
A CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AUTHORIZING THE  
CONSTRUCTION OF THE VAIL TO  
VALENCIA 115kV to 138 kV  
TRANSMISSION LINE UPGRADE PROJECT,  
ORIGINATING AT THE EXISTING VAIL  
SUBSTATION IN SEC. 4, T. 16S., R. 15E.,  
PIMA COUNTY, TO THE EXISTING  
VALENCIA SUBSTATION IN SEC. 5, T. 24S.,  
R. 14E., IN THE CITY OF NOGALES, SANTA  
CRUZ COUNTY, ARIZONA.

CASE NO. 144

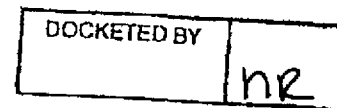
DOCKET NO. L-00000F-09-0190-00144

DECISION NO. 71282

Arizona Corporation Commission  
**DOCKETED**

OCT -7 2009

Open Meeting  
September 15 and 23, 2009  
Phoenix, Arizona

**BY THE COMMISSION:**

Pursuant to A.R.S. § 40-360, *et seq.*, after due consideration of all relevant matters, including the requests for review filed by the Intervenors, the Arizona Corporation Commission ("Commission") finds and concludes that the Certificate of Environmental Compatibility ("CEC") issued by the Arizona Power Plant and Transmission Line Siting Committee ("Siting Committee") is hereby approved as modified by this Order.

The Commission, in reaching its decision, has balanced all relevant matters in the broad public interest, including the need for an adequate, economical and reliable supply of electric power with the desire to minimize the effect thereof on the environment and ecology of this state, and finds that the CEC for the above-captioned application for siting approval is in the public interest as modified by this Order.

1 The Commission modifies the CEC issued by the Siting Committee to amend a portion of the  
 2 Project Alignment described in the Siting Committee's CEC on page 3, lines 12 through 23. The  
 3 Commission's amendment to the Project Alignment is shown below by striking the deleted  
 4 description of the route, and inserting the new route in the underlined description as follows:

5 The Project Alignment leaves the Kantor Substation southerly along the  
 6 foothills of the Santa Rita Mountains east of the Santa Cruz River. South of  
 7 Josephine Canyon, the Project Alignment drops out of the foothills and into the Santa  
 8 Cruz River Valley (11.8 miles). To this point from the Nogales Tap the Project  
 9 Alignment follows the alignment for the existing 115kV transmission line. North of  
 10 the intersection of that existing 115 kV transmission line alignment and Pendleton  
 11 Drive, the Project Alignment deviates from the existing 115 kV transmission line  
 12 alignment and shifts 0.2 miles west to a point 50 feet from the easterly edge of the  
 13 UPRR right-of-way. ~~The Project Alignment then continues paralleling the UPRR~~  
 14 ~~right of way to the Canez Substation (1.8 miles) and then continues southerly~~  
 15 ~~adjacent to the UPRR in the Santa Cruz River Valley (3.4 miles). The Project~~  
 16 Alignment then continues paralleling the UPRR right-of-way until reaching Kiwi  
 17 Court (0.5 miles) at which point it crosses over the UPRR track to a point 25 feet  
 18 from the westerly edge of the UPRR right-of-way. The alignment then resumes  
 19 paralleling the UPRR right-of-way to a point west of the Canez Substation (1.3  
 20 miles) at which point it crosses over the UPRR track to a point 50 feet from the  
 21 easterly edge of the UPRR right-of-way and then continues southerly adjacent to the  
 22 UPRR in the Santa Cruz River Valley (3.4 miles). Near the intersection of Pendleton  
 23 Drive and Avenida Coatimundi, the alignment shifts from the UPRR right-of-way  
 24 and parallels Avenida Coatimundi east to the Sonoita Substation (0.3 miles).

25  
 26 The Commission further modifies the CEC issued by the Siting Committee by deleting the  
 27 Siting Committee's Condition Nos. 16 and 23 and inserting new Condition Nos. 16 and 23 as  
 28 follows:

16. Prior to the date construction commences on this Project, the Applicant shall provide known homebuilders, neighborhood associations registered with the local governing jurisdiction, and developers of record, within one mile of the center line of the Certificated Project Alignment the identity, location, and a pictorial depiction of the type of power line being constructed, accompanied by a written description, and encourage the developers and homebuilders to include this information in the developers' and homebuilders' homeowners' disclosure statements. At the same time, the Applicant shall also provide this information to the Santa Rita Foothills Community Association, the Hilton Road Community Association, and the Vail Preservation Society.
23. For the Project, Applicant shall, within 30 days of the effective date of this Order, submit a Pole Finish Plan ("PFP") for the proposed monopole finish for each part of the Project. The PFP shall indicate where a dull galvanized steel finish will be used (e.g. in open terrain or where views of the poles will be against a sky background) versus using self-weathering steel (e.g. where visual views of the poles are against a terrain background). Further, the Pole Finish Plan (PFP) shall indicate that a dulled galvanized steel finish will be used in Segment 1A, North Route (Preferred Alignment), between the Vail Substation and Wilmot Road (i.e. where the line extends to the west from the Vail Substation and runs parallel to TEP's Vail-Robert Bills (138 kV) and Vail-Irvington (138 kV) lines). The PFP will be submitted to the Parties, landowners whose property is within 500 feet of either side of the center line and Commission Staff. The Parties and landowners whose property is within 500 feet of either side of the center line shall have 30 days to object to the PFP in writing to the Commission.

The Commission further modifies the CEC to add the following new conditions:

26. Applicant shall create a voluntary Citizens Advisory Council to assist in neighborhood and regional transmission planning related to this Project by providing

1 notice to all parties and members of the public who provided comment on the  
 2 Project. The notice shall provide information concerning the establishment of the  
 3 Citizens Advisory Council, and include the date, time, location and agenda of the  
 4 Council's initial meeting. The notice shall be docketed and provided to the parties  
 5 and members of the public that provided comment on the Project within 180 days of  
 6 the effective date of this Order. Within 60 days after the Council's initial meeting,  
 7 Applicant shall file a report in docket that provides an update on the status of the  
 8 Council.

- 9 27. The Applicant shall file a Revised Exhibit A describing the Project Alignment  
 10 consistent with the Commission's amendment of the route within 30 days of the  
 11 effective date of this Order.

12  
 13 The Commission further finds and concludes that in balancing the broad public interest in  
 14 this matter:

- 15 1. The Project is in the public interest because it aids the state in meeting the need for  
 16 an adequate, economical and reliable supply of electric power.  
 17 2. In balancing the need for the Project with its effect on the environment and ecology  
 18 of the state, the conditions placed on the CEC as modified by the Commission  
 19 effectively minimize its impact on the environment and ecology of the state.  
 20 3. The conditions placed on the CEC as modified by the Commission resolve matters  
 21 concerning the need for the Project and its impact on the environment and ecology of  
 22 the state raised during the course of proceedings, and as such, serve as the findings on  
 23 the matters raised.  
 24 4. In light of these conditions, the balancing in the broad public interest results in favor  
 25 of granting the CEC as modified by the Commission.

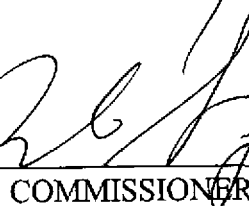
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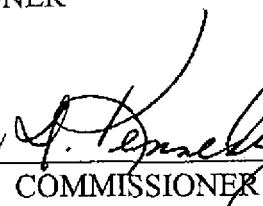
1 THE CEC ISSUED BY THE SITING COMMITTEE IS  
2 INCORPORATED HEREIN AND IS APPROVED AS MODIFIED BY ORDER OF THE  
3 ARIZONA CORPORATION COMMISSION

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5   
6 CHAIRMAN


  
COMMISSIONER

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9 COMMISSIONER

  
COMMISSIONER

  
COMMISSIONER

10  
11 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,  
12 Executive Director of the Arizona Corporation Commission,  
13 have hereunto, set my hand and caused the official seal of this  
14 Commission to be affixed at the Capital, in the City of  
15 Phoenix, this 7<sup>th</sup> day of October 2009.

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18 ERNEST G. JOHNSON  
19 Executive Director

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21 DISSENT: \_\_\_\_\_

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23 DISSENT: \_\_\_\_\_

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**BEFORE THE ARIZONA POWER PLANT AND  
TRANSMISSION LINE SITING COMMITTEE**

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IN THE MATTER OF THE APPLICATION OF  
UNS ELECTRIC, INC. FOR A CERTIFICATE  
OF ENVIRONMENTAL COMPATIBILITY  
FOR THE VAIL TO VALENCIA 115 KV TO  
138 KV TRANSMISSION LINE UPGRADE  
PROJECT, ORIGINATING AT THE EXISTING  
VAIL SUBSTATION IN SEC. 4, T.16S., R.15E.,  
PIMA COUNTY, TO THE EXISTING  
VALENCIA SUBSTATION IN SEC. 5, T.24S.,  
R.14E., IN THE CITY OF NOGALES, SANTA  
CRUZ COUNTY, ARIZONA.

Docket No. L-00000F-09-0190-00144

Case No. 144

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**CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY**

Pursuant to notice given as provided by law, the Arizona Power Plant and Transmission  
Line Siting Committee (the "Committee") held public hearings on June 2, 3, and 4, 2009 in Rio  
Rico, and July 8 and 9, 2009 near Chandler, Arizona all in conformance with the requirements of  
Arizona Revised Statutes ("A.R.S.") § 40-360, *et seq.*, for the purpose of receiving evidence and  
deliberating on the Application of UNS Electric, Inc. ("Applicant") for a Certificate of  
Environmental Compatibility ("CEC") in the above-captioned case (the "Project").

The following members and designees of members of the Committee were present at one  
or more of the hearings for the evidentiary presentations and/or for the deliberations:

John Foreman	Chairman, Designee for Arizona Attorney General Terry Goddard
David L. Eberhart, P.E.	Designee for Chairman, Arizona Corporation Commission
Paul Rasmussen	Designee for Director, Arizona Department of Environmental Quality
Jessica Youle	Designee for Director, Energy Department, Arizona Department of Commerce
Jeff McGuire	Appointed Member
Bill Mundell	Appointed Member

1	Patricia Noland	Appointed Member
2	Michael Palmer	Appointed Member
3	Michael Whalen	Appointed Member
4	Barry Wong	Appointed Member

5 The Applicant was represented by J. Matthew Derstine, Michael W. Patten, and Jason D.  
6 Gellman of Roshka, DeWulf & Patten, PLC, and Marcus G. Jerden of UniSource Energy  
7 Corporation. The following parties were granted intervention pursuant to A.R.S. § 40-360.05:  
8 Marshall Magruder and Elizabeth Webb, both in pro persona.

9 At the conclusion of the hearings, the Committee, having received the Application, the  
10 appearances of the parties, the evidence, testimony and exhibits presented at the hearings, and  
11 being advised of the legal requirements of A.R.S. §§ 40-360 to 40-360.13, upon motion duly  
12 made and seconded, voted 10 to 0 to grant the Applicant this CEC (Case No. 144) for the Project  
13 to rebuild the existing 115 kV transmission line as a 138 kV transmission line and interconnect  
14 that transmission line to the Vail Substation as set forth in the Application.

15 The Project as approved consists of approximately 57.7 miles of 138 kV transmission line  
16 and ancillary facilities along the route as described below. The Project starts at the Vail  
17 Substation, and ends at the Valencia Substation. A legal description and general location map of  
18 the Project is attached as Exhibit A.

19 As explained in the Project Application, the Project will:

- 20 • Interconnect the northern end of the line with a major import substation (the Vail  
21 345/138 kV Substation) instead of the Nogales Tap.
- 22 • Upgrade the line voltage from 115 kV line to 138 kV.
- 23 • Replace aging wooden H-frame structures with steel monopoles.

24  
25 As explained in the Project Application, the Project Alignment (the route granted for the  
26 Project in this CEC), consisting of a 500-foot-wide planning corridor except where noted, and as  
27 more further described in attached Exhibit A and the Application, is as follows:

1       The Project Alignment originates from the Vail Substation in Section 4, Township 16  
2 South, Range 15 East. The Project Alignment then extends westerly parallel to Tucson Electric  
3 Power Company's ("TEP's") Vail-Robert Bills (138 kV) and Vail-Irvington (138 kV) lines along  
4 an access road which is an east extension of the Old Vail Connection Road to where Old Vail  
5 Connection Road intersects Wilmot Road (2.3 miles). At this intersection, the Alignment turns  
6 south extending to the Nogales Tap and interconnects to the existing line (1.5 miles). From that  
7 interconnection, the alignment then continues south to the Kantor Substation (27.8 miles) utilizing  
8 the existing line that was previously rebuilt in accordance with the Application in Line Siting  
9 Case No. 78 and approved in Decision No. 56097 (August 17, 1988). No improvements, pole  
10 replacements, or construction are necessary therein and the existing line in this portion is hereby  
11 designated for operation at 138 kV.

12       The Project Alignment leaves the Kantor Substation southerly along the foothills of the  
13 Santa Rita Mountains east of the Santa Cruz River. South of Josephine Canyon, the Project  
14 Alignment drops out of the foothills and into the Santa Cruz River Valley (11.8 miles). To this  
15 point from the Nogales Tap the Project Alignment follows the alignment for the existing 115 kV  
16 transmission line. North of the intersection of that existing 115 kV transmission line alignment  
17 and Pendleton Drive, the Project Alignment deviates from the existing 115 kV transmission line  
18 alignment and shifts 0.2 miles west to a point 50 feet from the easterly edge of the UPRR right-of-  
19 way. The Project Alignment then continues paralleling the UPRR right-of-way to the Canez  
20 Substation (1.8 miles) and then continues southerly adjacent to the UPRR in the Santa Cruz River  
21 Valley (3.4 miles). Near the intersection of Pendleton Drive and Avenida Coatimundi, the  
22 alignment shifts from the UPRR right-of-way and parallels Avenida Coatimundi east to the  
23 Sonoita Substation (0.3 miles).

24       The Project Alignment extends southerly out of the Sonoita Substation along the existing  
25 line across Sonoita Creek and the Santa Cruz River to Old Tucson Road, and then parallels Old  
26 Tucson Road to a point near the intersection with Grand Avenue (5.9 miles).

27



At the intersection of Old Tucson Road and Grand Avenue, the line departs from the existing line to proceed east of and parallel to Grand Avenue on the east side of Nogales Wash through an industrial area (0.9 miles). The Project Alignment then returns to the existing line alignment near where Frank Reed Road intersects Grand Avenue, and continues south, along the west side of the Santa Cruz County Complex (0.8 miles). The Alignment then shifts east and passes through the Preston Mobile Home Park (0.3 miles) with a 1250-foot-wide planning corridor for this course only.

The Project Alignment then turns to the south through the Mariposa Mall, across Mariposa Road, and through the Loma Linda Shopping Center (0.4 miles). The Project Alignment continues on the existing line's alignment and turns to the east, entering the Valencia Substation located in Section 5, Township 24 South, Range 13 East (0.4 miles).

The Project will replace the existing wooden H-frame structures with steel monopoles from the Kantor Substation to the Valencia Substation as described in the Application. Steel monopoles will also be used between Vail Substation and the Nogales Tap; the existing transmission line portion constructed pursuant to Line Siting Case No. 78 is already on steel monopoles.

### CONDITIONS

This Certificate is granted upon the following conditions:

1. The Applicant shall obtain all approvals and permits required by the United States, the State of Arizona, Pima County, Santa Cruz County, the City of Tucson, the City of Nogales, the Town of Sahuarita, U.S. Bureau of Land Management ("BLM"), and any other governmental entities having jurisdiction necessary to construct the Project.
2. The Applicant shall comply with all existing applicable statutes, ordinances, master plans, county comprehensive plans, city general plans, project area development and subdivision plans, and regulations of the United States, the State

of Arizona, Pima County, Santa Cruz County, the City of Tucson, the City of Nogales, the Town of Sahuarita, and any other governmental entities having jurisdiction during the construction and operation of the transmission line.

3. If any archaeological, paleontological or historical site or object that is at least fifty years old is discovered on state, county or municipal land during the construction or operation of the transmission line, the Applicant or its representative in charge shall promptly report the discovery to the Director of the Arizona State Museum, and in consultation with the Director, shall immediately take all reasonable steps to secure and maintain the preservation of the discovery as required under A.R.S. § 41-844.
4. If human remains and/or funerary objects are encountered on private land during the course of any ground-disturbing activities relating to the construction or operation of the transmission line, the Applicant shall cease work on the affected area of the Project and notify the Director of the Arizona State Museum as required under A.R.S. § 41-865.
5. The Applicant shall comply with the notice and salvage requirements of the Arizona Native Plant Law (A.R.S. §§ 3-901 et seq. as applicable), county and municipal plant ordinances (as applicable) and shall, to the extent feasible, minimize the destruction of native plants during the construction and operation of the transmission line.
6. The Applicant shall not assign this Certificate or its interest in the Project authorized by this Certificate without prior approval of the Commission. Any assignment of this Certificate shall require the assignee to assume all responsibilities of the Applicant listed in this Certificate.
7. This authorization to construct this Project shall expire five years from the date the Certificate is approved by the Commission unless the transmission line is capable of operation. However, prior to expiration, the Applicant or its assignees

1 may request that the Commission extend this time limitation.

- 2 8. In the event that the Project requires an extension of the term of this Certificate  
3 prior to completion of construction, Applicant shall use reasonable means to  
4 notify by first class mail all landowners, neighborhood associations  
5 registered with the local governing jurisdiction, and residents within one  
6 mile of the Project corridor, all persons who made public comment at this  
7 proceeding, and all parties to this proceeding of the request. Applicant will  
8 provide the date, time and place of the hearing in which the Commission will  
9 consider its request for extension.
- 10 9. The Applicant shall make every reasonable effort to identify and correct, on a case-  
11 specific basis, all complaints of interference with radio or television signals from  
12 operation of the transmission lines and related facilities addressed in this  
13 Certificate. The Applicant shall maintain written records for a period of five years  
14 of all complaints of radio or television interference attributable to operation,  
15 together with the corrective action taken in response to each complaint. All  
16 complaints shall be recorded to include notations on the corrective action taken.  
17 Complaints not leading to a specific action or for which there was no resolution  
18 shall be noted and explained. Upon request, a copy of these records will be  
19 provided to Commission Staff.
- 20 10. Within 120 days of the Commission decision granting this Certificate, Applicant  
21 will post signs in public rights-of-way giving notice of the Project corridor to the  
22 extent authorized by law. The Applicant shall place signs in prominent locations at  
23 reasonable intervals such that the public is notified along the full length of the  
24 transmission line until the transmission structures are constructed. To the extent  
25 practicable, within 45 days of securing easement or right-of-way for the Project, the  
26 Applicant shall erect and maintain signs providing public notice that the property is  
27 the site of a future transmission line. Such signage shall be no smaller than a

normal roadway sign. The signs shall advise:

- (a) That the site has been approved for the construction of Project facilities;
- (b) The expected date of completion of the Project facilities;
- (c) A phone number for public information regarding the Project;
- (d) The name of the Project;
- (e) The name of the Applicant; and
- (f) The website of the Project.

11. Applicant, or its assignee(s), shall design the transmission lines to incorporate reasonable measures to minimize impacts to raptors.
12. Applicant, or its assignee(s), shall use non-specular conductors and dulled surfaces for transmission line structures.
13. Before construction on this Project may commence, the Applicant shall file a construction mitigation and restoration plan ("Plan") with ACC Docket Control and copies to all Parties that complies with all Conservation Measures as set forth in Exhibit B. Where practicable, the Plan shall specify the Applicant's plans for construction access and methods to minimize impacts to wildlife and to minimize vegetation disturbance outside of the Project right-of-way particularly in drainage channels and along stream banks, and shall re-vegetate, unless waived by the landowner, native areas of construction disturbance to its preconstruction state outside of the power-line right of way after construction has been completed. The Plan shall specify the Applicant's plans for coordination with the Arizona Game and Fish Department and the State Historic Preservation Office. The Applicant shall use existing roads for construction and access where practicable and the Plan shall specify the manner in which the Applicant makes use of existing roads.
14. With respect to the Project, Applicant shall participate in good faith in state and regional transmission study forums to coordinate transmission expansion plans

related to the Project and to resolve transmission constraints in a timely manner.

15. The Applicant shall provide copies of this Certificate to the City of Tucson, the Town of Sahuarita, the City of Nogales, Pima County, Santa Cruz County, the Arizona State Land Department, the State Historic Preservation Office, BLM, and the Arizona Game and Fish Department.
16. Prior to the date construction commences on this Project, the Applicant shall provide known homebuilders, neighborhood associations registered with the local governing jurisdiction, and developers of record, within one mile of the center line of the Certificated Project Alignment the identity, location, and a pictorial depiction of the type of power line being constructed, accompanied by a written description, and encourage the developers and homebuilders to include this information in the developers' and homebuilders' homeowners' disclosure statements.
17. Before commencing construction of Project facilities located parallel to and within 100 feet of any existing natural gas or hazardous liquid pipeline, the Applicant shall:
  - (a) Perform the appropriate grounding and cathodic protection studies to show that the Project's location parallel to and within 100 feet of such pipeline results in no material adverse impacts to the pipeline or to public safety when both the pipeline and the Project are in operation. If material adverse impacts are noted in the studies, Applicant shall take appropriate steps to ensure that such material adverse impacts are mitigated. Applicant shall provide to Commission Staff reports of studies performed; and
  - (b) Perform a technical study simulating an outage of the Project that may be caused by the collocation of the Project parallel to and within 100 feet of the existing natural gas or hazardous liquid pipeline. This study should either: i) show that such outage does not result in customer outages; or ii) include

operating plans to minimize any resulting customer outages. Applicant shall provide a copy of this study to Commission Staff.

18. Applicant will comply with the most current Western Electricity Coordinating Council/North American Electric Reliability Corporation Planning standards as approved by the Federal Energy Regulatory Commission, and National Electrical Safety Code construction standards.
19. The Applicant shall submit a self-certification letter annually, identifying progress made with respect to each condition contained in the Certificate, including which conditions have been met. Each letter shall be submitted to the Docket Control of the Arizona Corporation Commission and the parties on August 1 beginning in 2010. Attached to each certification letter shall be documentation explaining how compliance with each condition was achieved. Copies of each letter along with the corresponding documentation shall be submitted to the Arizona Attorney General and Department of Commerce Energy Office. The requirement for the self-certification shall expire on the date the Project is placed into operation.
20. Within sixty (60) days of the Commission decision granting this Certificate, the Applicant shall make good faith efforts to commence discussions with private landowners, on whose property the Project Alignment is located, to identify the specific location for the Project's right-of-way and placement of poles. Applicant shall make reasonable efforts to accommodate landowners' preferences regarding the placement of poles located on or adjacent to the landowners' property.
21. The Applicant shall make reasonable efforts to work with private landowners on whose property the Project right-of-way will be located, to mitigate the impacts of the location, construction, and operation of the Project.
22. Applicant shall construct the Project Alignment only within the corridor more fully described in the attached Exhibit A.

- 1           23.   For the Project, Applicant shall, within 30 days of the Commission decision  
2           approving the CEC, submit a Pole Finish Plan ("PFP") for the proposed monopole  
3           finish for each part of the Project. The PFP shall indicate where a dull galvanized  
4           steel finish will be used (e.g. in open terrain or where views of the poles will be  
5           against a sky background) versus using self-weathering steel (e.g. where visual  
6           views of the poles are against a terrain background). Further, the Pole Finish Plan  
7           (PFP) shall indicate that a dulled galvanized steel finish will be used in Segment  
8           1A, North Route (Preferred Alignment), between the Vail Substation and Wilmot  
9           Road (i.e. where the line extends to the west from the Vail Substation and runs  
10          parallel to TEP's Vail-Robert Bills (138 kV) and Vail-Irvington (138 kV) lines).  
11          The PFP will be submitted to the Parties, landowners whose property is directly  
12          impacted and Commission Staff. The Parties and landowners whose property is  
13          directly impacted shall have 15 days to object in writing to the Commission.
- 14          24.   The Certificate does not grant to the Applicant the right to construct a second  
15          circuit in Segment 1B – the existing line approved in Decision No. 56097 (August  
16          17, 1988) on single steel poles that is currently operating at 115 kV. This  
17          Certificate recognizes that, as part of the Vail to Valencia 115 kV to 138 kV  
18          Transmission Line Upgrade Project, the existing line in Segment 1B will now  
19          operate at 138 kV.
- 20          25.   Once all new replacement rights-of-way are acquired and the new 138 kV line is in  
21          commercial operation, UNS Electric shall remove all unused facilities and  
22          relinquish the existing 115 kV rights-of-way where no distribution is attached to the  
23          existing transmission line. The Applicant shall include in the self-certification letter  
24          required by Condition 19 notice of the relinquishment of any rights-of-way.
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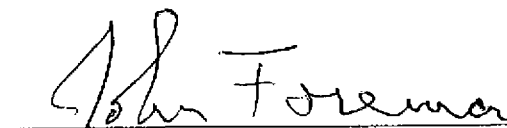
**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

This Certificate incorporates the following findings of fact and conclusions of law:

1. The Project is in the public interest because it aids the state in meeting the need for an adequate, economical and reliable supply of electric power.
2. In balancing the need for the Project with its effect on the environment and ecology of the state, the conditions placed on the CEC by the Committee effectively minimize its impact on the environment and ecology of the state.
3. The conditions placed on the CEC by the Committee resolve matters concerning the need for the Project and its impact on the environment and ecology of the state raised during the course of proceedings, and as such, serves as the findings on the matters raised.
4. In light of these conditions, the balancing in the broad public interest results in favor of granting the CEC.

DATED this 15<sup>th</sup> day of July 2009.

**THE ARIZONA POWER PLANT AND  
TRANSMISSION LINE SITING COMMITTEE**

  
Hon. John Foreman, Chairman



## Exhibit A

A transmission line corridor of 500' width except where noted, with the centerline, as determined from Arizona State Plane Coordinate mapping, more particularly described as follows:

Beginning at **Vail Substation**, at grid coordinate (X) 1041085.39, (Y) 391274.36, of Central Zone of Arizona State Plane Coordinate System 1983, and to which National Geodetic Survey point PUMP (PID - CZ0252) bears South 42 degrees 20 minutes 38 seconds West, 4,870.50 feet;

thence North 88 degrees 44 minutes 54 seconds West, 307.61 feet;

thence North 60 degrees 17 minutes 58 seconds West, 1,037.36 feet;

thence North 00 degrees 07 minutes 58 seconds West, 1,017.67 feet;

thence South 89 degrees 32 minutes 32 seconds West, 11,891.07 feet;

thence South 05 degrees 40 minutes 55 seconds West, 1,744.96 feet;

thence South 00 degrees 34 minutes 52 seconds East, 6,224.41 feet to a point in **Nogales Tap Substation**;

thence South 00 degrees 34 minutes 52 seconds East, 50,753.00 feet;

thence South 34 degrees 21 minutes 34 seconds West, 95,891.68 feet;

thence South 88 degrees 34 minutes 55 seconds West, 121.34 feet to a point in **Kantor Substation**;

thence South 03 degrees 13 minutes 57 seconds East, 158.25 feet;

thence South 21 degrees 14 minutes 55 seconds East, 22,453.78 feet;

thence South 00 degrees 29 minutes 36 seconds East, 9,011.69 feet;

thence South 19 degrees 02 minutes 10 seconds West, 1,725.59 feet;

thence South 00 degrees 29 minutes 28 seconds East, 12,408.16 feet;

thence South 12 degrees 35 minutes 44 seconds East, 2,722.98 feet;

thence South 00 degrees 28 minutes 50 seconds East, 13,826.04 feet;

thence South 56 degrees 02 minutes 44 seconds West, 1,101.12 feet to the beginning of a non-tangent curve concave to the southwest, having a radius of 5,853.84 feet, and to which a radial line bears North 47 degrees 55 minutes 45 seconds East;

thence southeasterly 2,370.68 feet along said curve through a central angle of 23 degrees 12 minutes 13 seconds;

thence South 18 degrees 52 minutes 02 seconds East, 5,858.00 feet to a point 172 feet westerly of the west side of **Cañez Substation**;

thence South 18 degrees 52 minutes 02 seconds East, 12,393.42 feet to the beginning of a curve concave to the northeast and having a radius of 5,553.78 feet;

1      thence southeasterly 3,974.97 feet through a central angle of 41 degrees 00 minutes 28 seconds;

2      thence South 59 degrees 52 minutes 30 seconds East, 1,369.94 feet;

3      thence North 64 degrees 22 minutes 52 seconds East, 1,337.41 feet to a point 63 feet southerly of the  
4      south side of **Sonoita Substation**;

5      thence South 25 degrees 54 minutes 45 seconds East, 2,434.49 feet;

6      thence South 18 degrees 53 minutes 51 seconds East, 6,598.53 feet;

7      thence South 37 degrees 22 minutes 02 seconds East, 6,610.08 feet;

8      thence South 00 degrees 35 minutes 23 seconds East, 7,555.17 feet;

9      thence South 30 degrees 26 minutes 05 seconds West, 1,143.95 feet;

10      thence South 03 degrees 55 minutes 22 seconds East, 3,724.62 feet;

11      thence South 17 degrees 58 minutes 34 seconds East, 3,169.01 feet;

12      thence South 79 degrees 39 minutes 56 seconds East, 1,303.27 feet;

13      thence South 43 degrees 47 minutes 11 seconds East, 1,683.12 feet;

14      thence South 04 degrees 49 minutes 19 seconds West, 1,849.85 feet;

15      thence South 00 degrees 35 minutes 14 seconds East, 3,400.89 feet;

16      thence within a 1250'-wide corridor, North 89 degrees 40 minutes 24 seconds East, 1,285.80 feet;

17      thence continuing in a 500'-wide corridor, South 01 degrees 13 minutes 18 seconds East, 2,106.57 feet;

18      thence North 88 degrees 43 minutes 12 seconds East, 2,191.97 feet to the terminus of said centerline at  
19      **Valencia Substation**, at grid coordinate (X) 1007459.01, (Y) 133493.23, of said Central Zone, and to which  
20      National Geodetic Survey point M423 (PID – CG0883) bears South 23 degrees 09 minutes 01 seconds  
21      East, 34,502.53 feet.

22      Said centerline is 57.72 miles in length, more or less.

**Exhibit B****CONSERVATION MEASURES**

The following conservation measures are to be implemented by the project proponent.

**General**

- All construction supervisors will be required to attend environmental training prior to project construction. The training will address environmental concerns, applicable environmental laws, and requirements for compliance. The training will highlight the PPC, YBCU, Gila topminnow, and LLNB so that supervisors are aware of the species and measures to be implemented to reduce potential impacts.
- The project biologist shall be consulted regarding any modifications to roads or towers to appraise the potential impacts to biological resources.
- A fire prevention plan will be developed and adhered to by all personnel to prevent an accidental wildfire.
- To avoid the spread of noxious weeds, construction equipment will be washed prior to entering the work site for the first time and prior to each subsequent return if removed from site.
- To avoid the spread of noxious weeds, areas requiring vegetation clearing around pole structures will be cleared to ground level but the root system of existing vegetation will be left intact to resprout.
- Areas where vegetation has been cleared and no future use is anticipated will be reseeded with appropriate seed mixtures to promote the recovery of native plants.
- All lath and flagging used to mark species will be removed following the completion of construction activities.

**Western-Yellow Billed Cuckoo**

- Existing access roads and right-of-way corridors will be used wherever possible for construction and maintenance activities.
- Construction through YBCU habitat should be limited to the period between September 1 and March 1.
- If construction occurs between March 1 and August 31 (breeding season), a preconstruction survey will be performed by a qualified biologist to determine if YBCUs are present along the proposed alignment. If nesting cuckoos are identified, a buffer of 0.1 mile on either side of the nest will be established to avoid disturbing the nesting birds. Monitoring of the nest will occur to allow construction to proceed once the nest is empty.

**Pima Pineapple Cactus**

- The limits of construction area, new roads, and location of towers will be marked by UNS Electric prior to construction. In areas of suitable habitat PPC survey(s) will be conducted at locations identified for ground clearing activities (e.g., tower locations) to ensure previously undetected PPC are documented prior to construction.
- All PPC documented during surveys will be clearly marked with lath and flagging prior to and during construction.
- Where feasible, UNS Electric will relocate facilities to avoid the PPC.
- All PPC that cannot be avoided will be mitigated as directed by the Arizona Department of Agriculture and ASLD.

**Southwestern Willow Flycatcher**

- Existing access roads and right-of-way corridors will be used wherever possible for construction and maintenance activities.
- Removal of cottonwood trees will be limited to the minimum amount necessary to construct and maintain the transmission line.

**Lesser Long-nosed Bat and Mexican Long-tongued Bat**

- All agave and columnar cacti will be avoided to the extent possible during construction. In the event that an agave or saguaro cannot be avoided, mitigation will occur as directed by the land managing agency.

**Gila Topminnow**

- No equipment or replacement poles will be allowed within the active flowing channel of the Santa Cruz River.

**Needle-spined Pineapple Cactus**

- Needle-spined pineapple cactus will be identified during a preconstruction survey and will be avoided to the extent possible during construction activities.

**Sonoran Desert Tortoise**

- If construction is to occur during the desert tortoise active period (February 15 to November 15), a pre-construction survey will be performed within tortoise habitats no earlier than within 48 hours prior to construction to identify desert tortoises or burrows using the desert tortoise survey guidelines (Attachment A).

- A biological monitor will be present during construction through areas where tortoises or burrows have been observed during surveys. The biological monitor will ensure that no tortoises are present in front of the equipment. If tortoises are identified, they will be moved to an appropriate location outside of harms way. Desert tortoise handling guidelines will be adhered to as outlined in the "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" compiled by the Arizona Game and Fish Department (Attachment A).
- The biological monitor will provide information to crews on appropriate notification measures in the event a tortoise is encountered when a qualified biologist is not present.
- In the event that a desert tortoise needs to be moved from the project alignment the tortoise should be at least 500 feet from but no more than 0.25 mile from where it was found. The tortoise shall be moved less than 48 hours in advance of disturbance to minimize the potential of the tortoise returning to the area.
- If tortoise burrows are found within the project alignment and they will be disturbed by construction activities, they shall be cleared of tortoises and then collapsed by a qualified biologist. The tortoise from the burrow is to be moved to a safe location and placed in a natural or artificial burrow.
- If tortoise burrows are found adjacent to the project alignment in a location that will not be directly impacted, burrow entrances may be fenced off temporarily so that tortoises present within the burrow do not wander onto the project alignment.
- If construction is to occur during the active period for the desert tortoise (February 15 to November 15), equipment will be inspected each morning when equipment is parked overnight to ensure that no tortoises have moved under the equipment.
- Vehicles are to stay on roads whenever possible.
- Vehicles operating on secondary roads within desert tortoise habitat should limit vehicle speeds to 15 mph or less.

### **Migratory Bird Treaty Act**

- If construction occurs between March 1 and August 31 (breeding season), a preconstruction survey will be performed by a qualified biologist to determine if nesting migratory birds are present. If nesting raptors are identified, the appropriate spatial buffer listed in the USFWS Guidelines for Raptor Protection from Human and Land Use Disturbances (Ramin and Muck 2002) will be established to avoid disturbing the nesting birds. Monitoring of the nest will occur to allow construction to proceed once the nest is empty.

### **Arizona Native Plants**

- Plants protected under the Arizona Native Plant Law will be avoided wherever feasible. If removal of any of the species listed in Table C-7 is necessary across State and private land, it is recommended that the applicant contact the Arizona Department of Agriculture at least 60 days prior to land clearing activities to provide proper notification and verify proper permit acquisition.

**Table C-7**  
**Arizona Native Protected Plants Observed in the Action Area**

Species	Protection
Pima pineapple cactus	Highly Safeguarded
Blue palo verde	Salvage Assessed
Velvet mesquite	Harvest Restricted; Salvage Assessed
Saguaro	Salvage Restricted
Ironwood	Salvage Assessed
Ocotillo	Salvage Restricted
Banana yucca	Salvage Restricted
Sotol	Salvage Restricted
All cacti (cholla, barrel cacti, pincushion, etc.)	Salvage Restricted
<b>Salvage Restricted –</b>	Collection by permit only.
<b>Harvest Restricted –</b>	Permits required to remove plant by-products (fuelwood).
<b>Salvage Assessed –</b>	Plants have a significant value if salvaged; permits required for plant removal and salvage.
<b>Highly Safeguarded –</b>	Plants whose prospects for survival in Arizona are in jeopardy or in danger of extinction.

Desert Tortoise Survey Guidelines for Environmental Consultants  
October 2007

The following informal guidelines are intended to aid private consultants surveying for presence of tortoises on development projects in the Sonoran Desert. Following these guidelines will not provide quantified abundance estimates.

1) Surveys will be most productive during tortoise activity periods, primarily during the summer monsoon season (July – September) but also in the spring (April) and fall (October). Tortoises are most active in the morning and evening during summer, late morning to afternoon in spring and fall. Results from summer/fall monitoring plots indicate that tortoises are active at temperatures from 20 to 45°C (1cm above ground).

2) In the Sonoran Desert, tortoises usually occur on rocky slopes in desertscrub to semidesert grassland, as well as along washes, and extending into creosotebush flats. Burrows typically occur below rocks and boulders and may be irregularly shaped. Soil burrows and those in wash banks may have a 1/2-moon appearance.

3) Presence-absence surveys (3 km hectare plots) or Clearance surveys (100% coverage), depending on project type, are recommended to survey a discrete parcel of land. The number of hectare plots per unit area depends on the desired intensity of the survey.

4) Surveyors should record all live tortoises, carcasses, scat, verified burrows (with scat or tortoise inside), and otherwise suitable/potential burrows (empty) and report to the Department.

5) Refer to the Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" if handling will be necessary.

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# GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES ENCOUNTERED ON DEVELOPMENT PROJECTS

Arizona Game and Fish Department

Revised January 17, 1997

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

Desert tortoises of the Sonoran population are those occurring south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position at all times and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 105 degrees fahrenheit unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to two miles, but no further than necessary from its original location. If a release site, or alternate burrow, is unavailable within this distance, and ambient air temperature exceeds 105 degrees fahrenheit, the Department should be contacted to place the tortoise into a Department-regulated desert tortoise adoption program. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, will also be placed in desert tortoise adoption programs. *Managers of projects likely to affect desert tortoises should obtain a scientific collecting permit from the Department to facilitate temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- These guidelines do not apply to the Mohave population of desert tortoises (north and west of the Colorado River). Mohave desert tortoises are specifically protected under the Endangered Species Act, as administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department. We recommend that the Department be contacted during the planning stages of any project that may affect desert tortoises.
- Take, possession, or harassment of wild desert tortoises is prohibited by state law. Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.

RAC:NLO:rc



